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Appl. No. 09/759,486

Reply

Reply to Examiner's Answer dated 18 May 200

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**IN THE UNITED STATES PATENT AND TRADEMARK  
OFFICE BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Appl. No. : 09/759,486  
Appellant(s) : PELLETIER, Daniel  
Filed : 12 January 2001  
Title : METHOD AND APPARATUS FOR  
DETERMINING CAMERA MOVEMENT  
CONTROL CRITERIA

TC/A.U. : 2615  
Examiner : JONES, Heather R.

Atty. Docket : US 010002

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On: July 12, 2006

By: John C. Fox

**APPELLANT'S REPLY**

Board of Patent Appeals and Interferences  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply of Appellant is in response to the Examiner's  
Answer dated 18 May 2006, which was in response to Appellant's  
Brief dated 7 November 2005.

Claims 18 and 19

The indication of allowability of claims 18 and 19 if  
rewritten to incorporate the limitations of claim 1 is noted  
with appreciation.

Claims 1, 3-7, 9-12, 16 and 17

In response to Appellant's argument that Chim does not  
anticipate the rejected claims, and in particular claims 1 and  
7, since Chim does not disclose selecting at least one sequence  
of camera parametrics from a plurality of sequences of camera  
parametrics, the Examiner has responded that claims 1 and 7

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only require the apparatus to select at least one sequence of camera parametrics selected from the group of movements including scanning, zooming, tilting, orienting, panning, fading, zoom-and-pull-back, fade-in and fade-out, and that furthermore Chim discloses selecting at least two of these, panning and zooming, therefore meeting the claimed limitations. EX. ANS., pages 7 and 8.

However, as stated in Appellant's BRIEF, panning and zooming are predetermined as the only types of camera movement to be employed, and the instructions for panning and zooming are also predetermined, i.e., to continue panning and zooming until the change in relative signal levels transmitted from the microphones stabilizes.

In response to this argument, the Examiner has argued that having two different camera parametrics that can be used in any order meets the limitation of the camera selecting from a plurality of sequences of camera parametrics, the different sequences being; zoom only, pan only, zoom and then pan, or pan and then zoom. EX. ANS., page 8.

However, as pointed out in Appellant's BRIEF, a 'sequence of camera parametrics' is a generalized set of instructions for performing known camera movements, i.e., a set of rules for determining the manner of execution of the chosen parametric, e.g., the zoom or pan operation.

The sequence chosen as exemplary by the Examiner, i.e., zoom only, pan only, zoom and then pan, or pan and then zoom, does not represent the selection of one or more sequences from a plurality of sequences, but only represents one of a multitude of possible random sequences which could occur in response to the random movements of a speaker being tracked by Chim's system.

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In response to Appellant's argument that Chim does not teach or suggest determining criteria for executing the selected sequence of camera parametrics, the Examiner has argued that Chim determines the location of objects in a room based on sound, which in turn is used to execute the zooming or panning sequence.

However, determining the location of objects in a room based on sound is not the same as determining criteria for executing the selected sequence of camera movements. On the contrary, the single criterion of sound, and more particularly, the triangulation of relative signal levels from stereo microphones, has been predetermined as the only criterion to determine camera movements. No other criteria are used, so that determination of any other criteria is not possible. The single criterion of sound has been predetermined.

In response to this argument, the Examiner has argued that the camera would not be able to predetermine the movement of the speaker. EX. ANS., page 8. However, this misconstrues Appellant's argument, which is not that the movement of the speaker is predetermined, but rather that the use of sound to control the camera's movements is predetermined.

In response to Appellant's argument with respect to claims 3, 4, 9 and 10 that Chim is not able to determine the number or position of objects in a scene, the Examiner has argued that Chim discloses that his system can determine the current speaker from several different speakers, by, for example, if two different sounds were coming from two different places in the room, the apparatus would be able to determine that there are two objects in the room. EX. ANS., page 9.

However, Chim's apparatus can only track one object based on sound coming from that object. If sounds were coming from different places in the room, the camera could only continue to

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pan and zoom until the change in relative signal levels stabilizes. See col. 4, lines 53 and 54. Thus, if two different sounds were coming from two different places simultaneously, e.g., two different speakers talking simultaneously, the camera would pan to a location between the objects, and would thus not focus on either speaker! Thus, when tracking different speakers, Chim's system is able to precisely determine the position of each speaker when they are talking (col. 4, lines 65-67; emphasis added), not two or more speakers when they are talking simultaneously.

In response to Appellant's argument that scenes include objects other than speakers, which objects may not emit sound, the Examiner has argued that he is entitled to define the term 'object' to be 'speaker', because the claims do not define the term 'object', and therefore the Examiner is entitled to the broadest interpretation. EX. ANS., page 10.

However, the plain meaning of the word 'object' as well as Appellant's specification make clear that it is not to be limited to 'speaker'. See, e.g., page 7 of the specification, wherein it is stated that: 'Figure 2a illustrates a typical scene that includes at least five computer-vision recognizable or determined objects, i.e., person A 410, person B 420, couch 450, table 430 and chair 440, respectively.'

Since Appellant's claims must be interpreted in light of the specification as well as the plain meaning of words, the Examiner must use Appellant's meaning of the word 'object' when examining the claims.

In response to Appellant's argument with respect to claims 5 and 11 that sound detection is not speech recognition, the Examiner has disagreed. EX. ANS., page 10. However, the interpretation of sound detection as 'speech recognition' is at

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odds with the accepted meaning of the term, and no evidence in support of this interpretation has been provided.

In response to Appellant's argument that Chim's system is activated by sound of any kind, the Examiner has pointed out that Chim discloses an interface card (18) which is capable of differentiating different kinds of sounds, which can aid in tracking a particular speaker in the presence of ambient noise. EX. ANS., page 10.

However, this feature is not the same as speech recognition, but merely a means for filtering out ambient noise.

For all of the above reasons, as well as those set forth in Appellant's BRIEF, it is urged that the rejection of claims 1, 3-7, 9-12, 16 and 17 as being anticipated by Chim, and of claims 13-15 as being unpatentable over Chim in view of Steinberg are in error and should be reversed.

Respectfully submitted,



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